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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,445	11/26/2003	Jorge R. Serrano	C0034	1197
21495	7590	07/20/2004	EXAMINER	
CORNING CABLE SYSTEMS LLC P O BOX 489 HICKORY, NC 28603			MAYO, TARA L	
		ART UNIT		PAPER NUMBER
				3671

DATE MAILED: 07/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/724,445	SERRANO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tara L. Mayo	3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-45 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-45 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 26 November 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 01 02 04.

- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 26 and 43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The scope of claim 26 is unclear because it is an improper Markush-type claim. Claim 43 is similarly rejected.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 15, 17, 18, 20, and 25 through 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Winter et al. (U.S. Patent No. 5,394,904).

Winter et al. '904, as seen in Figures 1 through 8, show a duct (20) suitable for being securely held in a channel cut in a paved surface comprising:  
with regard to claim 15,

an inner tube (21); and

a jacket (28), the jacket generally surrounding the inner tube, the jacket being formed from a material that is compressible so that when the duct is placed within the channel the jacket material is capable of being compressed, thereby forming a friction fit between the duct and the channel (col. 4, lines 50 through 66);

with regard to claim 17,

further comprising an armor layer (32);

with regard to claim 18,

the armor layer being formed from helically wrapped tape (Fig. 7);

with regard to claim 20,

the inner tube having ribs (the back side of elements 22);

with regard to claim 25,

the inner tube having ribs (the back side of elements 22) on a portion of the inner surface and an armor layer (32);

with regard to claim 26,

further comprising at least one wire wrapped about the inner tube, the wire being a conductive material (claim 17, lines 16 through 27);

with regard to claim 27,

further comprising at least one conductive material (claim 17, lines 16 through 27); and

with regard to claim 28,

the jacket being formed from at least two layers.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 16, 19, 21, and 22 through 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winter et al. (U.S. Patent No. 5,394,904).

With regard to claims 16 and 24, Winter et al. '904, as seen in Figures 22 and 23, show a duct (20I) suitable for being securely held in a channel cut in a paved surface comprising:

with regard to claim 15,

an inner tube (21); and

a jacket (26I), the jacket generally surrounding the inner tube, the jacket being formed from a material that is compressible so that when the duct is placed within the channel the jacket material is capable of being compressed, thereby forming a friction fit between the duct and the channel (col. 4, lines 50 through 66); and

with regard to claims 16 and 24,

the jacket being a foamed material adapted for being compressed when inserted into the channel; and

with regard to claim 24,

an armor layer (209I) generally disposed between the inner tube and the jacket.

With regard to claims 16 and 24, Winter et al. '904 fail to teach the jacket being compressible by about five percent or more along a major dimension thereof. It would have been obvious to one having ordinary skill in the art of conduits at the time the invention was made through routine experimentation and optimization to determine an optimal amount of compressibility for the jacket. The motivation would have been to impart a desired degree of overall compressibility to the structure.

Winter et al. '904, as seen in Figures 22 and 23, show a conduit construction wherein an inner tube is reinforced with longitudinally wrapped coil members (209I) and expressly teach (col. 14, lines 54 through 60) an equivalent alternative embodiment wherein the coil members (209J) are helically wrapped.

With regard to claim 9, Winter et al. '904 as seen in Figures 1 through 8 disclose all of the features of the claimed invention with the exception(s) of longitudinally wrapped armor tape. However, in view of the express teaching by the reference of the equivalence of reinforcing members disposed helically and longitudinally along the length of the inner tube, it would have been obvious to one having ordinary skill in the art of conduits at the time of invention to substitute longitudinally wrapped armor tape for helically wrapped armor tape.

With regard to claims 21 and 22, Winter et al. '904 fail to teach a duct having a non-round cross section. However, it has been held that a mere change in shape is a matter of choice which one having ordinary skill in the art would find obvious at the time of invention absent evidence of significance or criticality. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

With regard to claim 23, Winter et al. '904 fail to teach the jacket being formed from a heat resistant material. It would have been obvious to one having ordinary skill in the art of conduits at the time of invention to modify the device shown by Winter et al. '904 such that the jacket would be formed from heat resistant material. The motivation would have been to provide a means by which to protect the conduit structure from damage by heat.

8. Claims 1 through 13 and 29 through 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaylin (U.S. Patent No. 4,896,997) in view of Winter et al. (U.S. Patent No. 5,394,904).

With regard to claims 29 through 34, 38 through 40, and 42 through 45, the method steps recited therein and the claimed structural limitations are taught by the combination of the cable burying method disclosed by Gaylin '997 and the duct structure shown by Winter et al. '904 as applied above. The motivation for substituting the duct shown Winter et al. '904 for that disclosed by Gaylin '997 would have been to install a reinforced conduit structure.

With regard to claims 35 and 41, Gaylin '997 and Winter et al. '904 fail to teach the jacket being formed from a heat resistant material. It would have been obvious to one having ordinary skill in the art of conduits at the time of invention to further modify the method disclosed by the combination of Gaylin '997 and Winter et al. '904 such that the jacket would be formed from heat resistant material. In view of the teaching by Winter et al. '904 for "any suitable polymeric material" (col. 4, lines 52 through 54), the motivation would have been to provide a means by which to protect the conduit structure from damage by heat.

With regard to claim 36, Gaylin '997 and Winter et al. '904 fail to teach a duct having a non-round cross section. However, it has been held that a mere change in shape is a matter of choice which one having ordinary skill in the art would find obvious at the time of invention absent evidence of significance or criticality. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

With regard to claim 37, Gaylin '997 and Winter et al. '904 fail to teach a ratio between a channel width and a major dimension of the duct being about 0.95 or less. It would have been obvious to one having ordinary skill in the art of conduits at the time the invention was made through routine experimentation and optimization to determine an optimal width of the channel relative to the duct. The motivation would have been to effect a desired fit of the duct within the channel.

*Conclusion*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

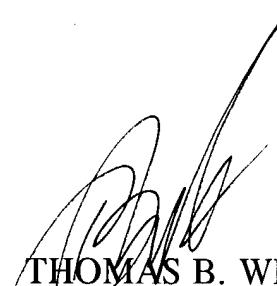
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tara L. Mayo whose telephone number is 703-305-3019. The examiner can normally be reached on Monday through Friday 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 703-308-3870. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3671

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
TBM  
11 July 2004

  
THOMAS B. WILL  
SUPERVISORY PATENT EXAMINER  
GROUP 3600